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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/481,990	01/11/2000	Florian Lesage	989.6351DIV	6424

22469            7590            03/05/2002

SCHNADER HARRISON SEGAL & LEWIS, LLP  
1600 MARKET STREET  
SUITE 3600  
PHILADELPHIA, PA 19103

EXAMINER

LANDSMAN, ROBERT S

ART UNIT	PAPER NUMBER
1647	10

DATE MAILED: 03/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action</b>	<b>Application N .</b>	<b>Applicant(s)</b>
	09/481,990	LESAGE ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Robert Landsman	1647

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 09 January 2002 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a)  The period for reply expires 3 months from the mailing date of the final rejection.
- b)  The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1.  A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2.  The proposed amendment(s) will not be entered because:
  - (a)  they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b)  they raise the issue of new matter (see Note below);
  - (c)  they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d)  they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_.

3.  Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4.  Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5.  The a) affidavit, b) exhibit, or c) request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6.  The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7.  For purposes of Appeal, the proposed amendment(s) a) will not be entered or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: None.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 11 and 12.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

8.  The proposed drawing correction filed on \_\_\_\_\_ is a) approved or b) disapproved by the Examiner.
9.  Note the attached Information Disclosure Statement(s)( PTO-1449) Paper No(s). \_\_\_\_\_.
10.  Other: \_\_\_\_\_.

Continuation of 5. Claims 11 and 12 remain rejected under 35 USC 101 for the reasons already of record on pages 3-7 of the Office Action dated 9/24/01. Applicants argue that when the claimed invention has a well-established utility such that a person of ordinary skill in the art would immediately appreciate why the invention is useful based on the characteristics of the invention and the utility is specific, substantial and credible, then a rejection based on a lack of utility is improper and that Office personnel must establish that it is more likely than not that one of ordinary skill in the art would doubt the truth of the statement of utility. Applicants argue that the TWIK-1 protein of the present invention is a potassium channel protein and that structural similarity to a compound known to have a particular therapeutic or pharmacological utility is sufficient to support an assertion of therapeutic utility for a new compound. Applicants show that TWIK-1 is K<sup>+</sup>-selective and exhibits weak inward rectification and is sensitive to intracellular acidification and phosphorylation by PKC. Applicants further argue that cells expressing TWIK-1 can be used to screen compounds which are capable of regulating its activity and that chromosomal localization, pharmaceutical compositions and antibodies to TWIK-1 also represent utilities.

These arguments have been considered, but are not deemed persuasive. First, while Applicants have provided data showing that TWIK is a K<sup>+</sup>-selective channel protein, they have not demonstrated a specific utility for the potassium channel of the present invention, or how the artisan would be able to use this particular protein. Using this protein to screen compounds which modulate the channel's function would not be a specific or substantial utility since the artisan would not know what to do with the compounds once they have been identified. Use for further research is not a patentable utility when, as in this case, that research is to further characterize that which is being claimed. Furthermore, since any cDNA will be able to localize to a chromosome, chromosomal localization is not a specific utility. There is no disclosure in the specification as to what information chromosomal localization of the cDNA encoding TWIK-1 will provide.



LORRAINE SPECTOR  
PRIMARY EXAMINER